

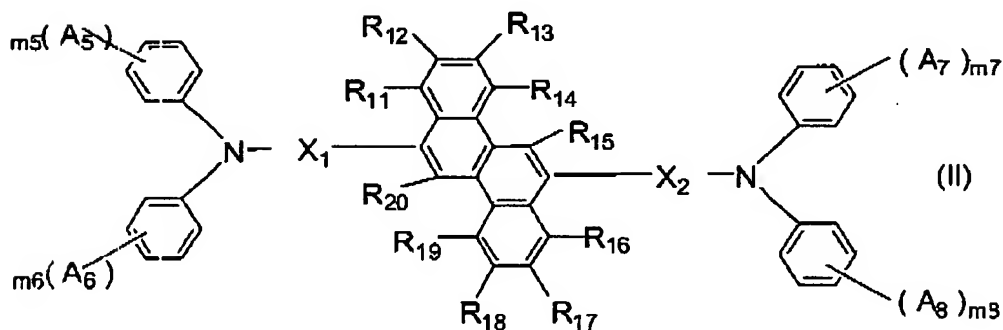
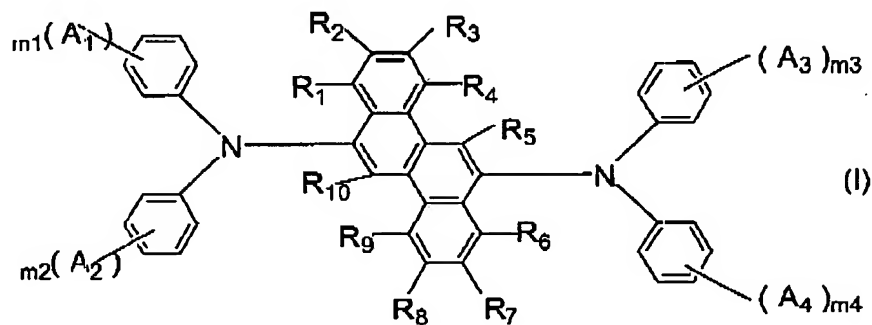
Serial No. 10/532,794
Atty Dkt No. 28955.4026

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REMARKS

Claims 1-8 remain herein.

Applicant's claim 1 recites an organic electroluminescent device material, capable of emitting blue light, comprising an aromatic amine derivative represented by any of the following formulas (I) and (II):

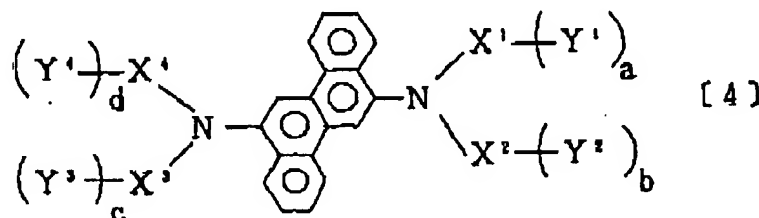


with the proviso that in formula (I), at least one of A₁ to A₄ does not represent a hydrogen atom, that in formula (II), at least one of A₅ to A₈ does not represent a hydrogen atom.

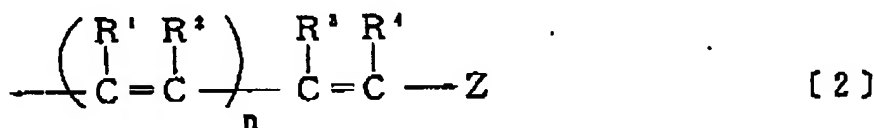
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1. Claims 1-8 were rejected under 35 U.S.C. § 103(a) over either of Hosokawa et al. EP 1061112, JP 2001-131541, U.S. Patent 6,951,693, or U.S. Patent 6,743,948.

Hosokawa EP '112 recites the following formula (4)



wherein X^1 to X^4 each independently represents a substituted or unsubstituted arylene group having 6 to 30 carbon atoms; a to d each independently represents an integer of 0 to 2; and Y^1 to Y^4 each independently represents:



Hosokawa discloses a broad genus and applicant's claimed compounds are species within that genus. The fact that a claimed species or subgenus is encompassed by a prior art genus is not sufficient by itself to establish a prima facie case of obviousness. See *In re Baird*, 16 F.3d 380, 382 (Fed. Cir. 1994); MPEP 2144.08.

Applicant's claimed formula does not read on any of Hosokawa's exemplified compounds. In addition, there are structural differences between applicant's claimed compounds and Hosokawa's formula (4). To arrive to applicant's claimed compounds, each of X^1 to X^4

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must be phenylene; each of a, b, c, and d must be zero; and at least one of X^1 to X^4 must be substituted with one of applicant's claimed substituents.

Unlike applicant's claim 1, Hosokawa does not disclose or teach that at least one of the X^1 to X^4 arylene groups must be substituted. Applicant's claimed substituted compound achieves superior properties:

The compound of the present invention represented by any of the formulas (I) to (IV) has a structure in which amine moieties substituted by a substituent-containing benzene ring are linked to a chrysene moiety. Therefore, association of molecules of the compound is prevented, thereby prolonging the life time. The compound of the present invention exhibits highly fluorescent properties in the solid state and excellent electric-field-induced emission characteristics, and attains a fluorescence quantum efficiency of 0.3 or more. In addition, the compound exhibits excellent hole-injectability and hole-transportability from a metallic electrode or an organic thin-film layer, as well as excellent electron-injectability and electron-transportability from a metallic electrode or an organic thin-film layer. Thus, the compound of the present invention is effectively used as an organic EL device material. The compound may be used in combination with another hole-transporting material, another electron-transporting material, or a doping material.

Specification page 13, lines 1-19 (emphasis added here).

In addition, applicant's claim 1 recites "an organic electroluminescent device material, capable of emitting blue light." There is no indication in Hosokawa that the disclosed compounds emit blue light. The Office Action states that the Examples and Tables in Hosokawa disclose the formation of blue light emitting devices. There is no indication in the cited prior art that a compound of the claimed formula emits blue light. Instead, Hosokawa states in the Background section that the prior art devices do not emit in the orange to red regions and that an EL device emitting in the region of orange to red is desired. See page 3, lines 32-34 of Hosokawa EP '112. In addition, Hosokawa states that "[b]y using a doping material, luminance

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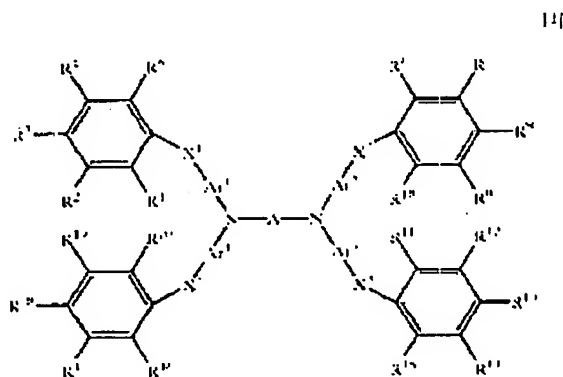
and the efficiency of light emission can be improved and blue light and red light can be emitted" (see Hosokawa '948 at column 90, lines 62-64). Thus, Hosokawa suggests that the disclosed compounds do not emit blue light and that the use of undisclosed doping material would be required to achieve such capability.

Alleged obviousness, based on structural similarity, is rebuttable by proof that the claimed compounds possess unexpectedly advantageous or superior properties. MPEP § 2144.09(VII) (citing In re Papesch, 315 F.2d 381 (C.C.P.A. 1963) and In re Wiechert, 370 F.2d 927 (C.C.P.A. 1967)). Because applicant's claimed compounds possess the unexpected properties of emitting blue light, extended life time, high fluorescent properties, excellent electric-field-induced emission characteristics, excellent hole-injectability and hole-transportability from a metallic electrode or an organic thin-film layer, and excellent electron-injectability and electron-transportability from a metallic electrode or an organic thin-film layer, applicant's claimed compounds are not obvious over Hosokawa.

For the foregoing reasons, Hosokawa does not disclose all elements of applicant's claimed invention, and further discloses nothing that would have suggested applicant's claimed invention to one of ordinary skill in the art. Furthermore, there is no disclosure or teaching in Hosokawa, or otherwise in this record, that would have suggested the desirability of modifying any portions thereof effectively to anticipate or suggest applicant's presently claimed invention. For all the foregoing reasons, applicant respectfully requests reconsideration and withdrawal of this rejection and allowance of all claims 1-7.

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2. Claims 1-7 were also rejected under 35 U.S.C. § 103(a) over Onikubo U.S. Patent 6,280,859. The Office Action states that Onikubo's formula [1] discloses an A group which may be a fused aromatic group, an Ar group which may be a substituted aromatic group, and an X group which may be an alicyclic residue. Onikubo's formula [1] is as follows:



Applicant's claimed formula does not read on any of Hosokawa's exemplified compounds. In addition, there are structural differences between applicant's claimed compounds and Onikubo's formula (1). To get to applicant's claimed compounds, Onikubo's A group which may be a fused aromatic group (which encompasses a very broad range of chemical groups) must be chrysene, each of Onikubo's Ar¹ to Ar⁴ must be a phenyl ring, and each of applicant's A₁ to A₈ groups must be either aryloxy (in which case Onikubo's groups X¹ to X⁴ must be -O-), or a cycloalky group substituted with an aryl group.

In addition, applicant's claim 1 recites "an organic electroluminescent device material, capable of emitting blue light." There is no indication in Onikubo that the disclosed compounds emit blue light. Instead, Onikubo states that "a dopant can improve the light emission brightness

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and the light emission efficiency, and can attain the red or blue light emission.” (see Onikubo at column 179, lines 48-51). Thus, Onikubo indicates that the disclosed compounds do not emit blue light and that the use of unidentified doping material is required to achieve such capability

As discussed above, alleged obviousness based on structural similarity, is rebuttable by proof that the claimed compounds possess unexpectedly advantageous or superior properties. MPEP § 2144.09(VII) (citing In re Papesch, 315 F.2d 381 (C.C.P.A. 1963) and In re Wiechert, 370 F.2d 927 (C.C.P.A. 1967)). Because applicant’s claimed compounds possess the unexpected properties of emitting blue light, they are not obvious over Onikubo.

Therefore, Onikubo does not anticipate applicant’s claimed invention, and further discloses nothing that would have suggested applicant’s claimed invention to one of ordinary skill in the art. Furthermore, there is no disclosure or teaching in Onikubo, or otherwise in this record that would have suggested the desirability of modifying any portions thereof effectively to anticipate or suggest applicant’s presently claimed invention. For all the foregoing reasons, applicant respectfully requests reconsideration and withdrawal of this rejection and allowance of all claims 1-7.

3. Claims 1-8 were provisionally rejected on the nonstatutory ground of obviousness-type double patenting over claims 1-5 and 12-23 of Funahashi U.S. Patent Application No. 11/282,697. Applicant may be willing to submit a terminal disclaimer to address this rejection if the current claims of the present application are deemed otherwise allowable.

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For all the foregoing reasons, all claims 1-8 are now proper in form and patentably distinguished over all grounds of rejection cited in the Office Action. The PTO is hereby authorized to charge or credit any necessary fees to Deposit Account No. 19-4293. Should the Examiner deem that any further amendments would be desirable in placing this application in even better condition for issue, he is invited to telephone applicant's undersigned representative.

Respectfully submitted,

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Date: April 7, 2008

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CERTIFICATE OF TRANSMISSION

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By: Hortense Coleman

Hortense G. Coleman